Application No. 10/590,657

Amendment dated October 1, 2009

Reply to Office Action of May 1, 2009

AMENDMENTS TO THE CLAIMS

Claims 1-30 (CANCELLED)

31. (Currently Amended) A method for treating or preventing a disease caused by an agenta

non-living compound possessing at least one accessible sulphate and/or at least one

accessible phosphate group comprising administering to a patient in which-need thereof a

therapeutically effective amount of a polypeptide comprising the sequence of SEQ ID

NO:1, or a functional fragment or derivative thereof, or of a nucleic acid comprising the

sequence of SEQ ID NO:2, or a functional fragment or derivative thereof.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Currently Amended) The method according to elaim 34 claim 31, wherein the non-

living compound or composition is selected from the group consisting of DSS, sulphated

carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium

sulphate, phosphate group exposing compounds or compositions, preferably DNA,

deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and

calcium phosphate exposing compounds or compositions.

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36. (Cancelled)

37. (**Previously Presented**) The method according to claim 31, wherein the disease is an acute or chronic inflammation, preferably inflammatory bowel disease, more preferably ulcerative colitis.

38. (Cancelled)

39. (Cancelled)

- 40. (Currently Amended) A method for identifying an agent possessing at least one accessible sulphate and/or at least one accessible phosphate group and/or regulating the effective amount of the said agent in a sample comprising the steps of:
- a) -incubating a sample with a polypeptide comprising the sequence of SEQ ID NO:1, or a functional derivative or fragment thereof, or of a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional derivative or fragment thereof; and,
- b) identifying the complex comprising the agent possessing at least one accessible sulphate and/or phosphate group and the polypeptide/nucleic acid as defined in step a).

- 41. (**Previously Presented**) The method according to claim 40, wherein the identifying and/or regulating is carried out by using the at least one accessible sulphate and/or at least one accessible phosphate group.
- 42. (**Previously Presented**) The method according to claim 40, wherein the identifying and/or regulating is carried out by varying the amount and/or the length of the polypeptide or of the nucleic acid.
- 43. (**Previously Presented**) The method according to claim 40, wherein regulating the effective amount of an agent includes inactivating and/or capturing said agent.
- 44. (**Previously Presented**) The method according to claim 40, wherein the agent comprises an agent being a microorganism.
- 45. (Currently Amended) The method of claim 44, wherein said microorganism is a bacterium or a virus, the bacteria including the genera <u>Streptococcus</u>, <u>Staphylococcus</u>, <u>Escherichia</u>, <u>Helicobacter</u>, <u>Salmonella</u> <u>Streptococcus</u>, <u>Staphylococcus</u>, <u>Escherichia</u>, <u>Helicobacter</u>, <u>Salmonella</u> and <u>Bacillus</u>.
- 46. (**Previously Presented**) The method of claim 40, wherein said agent comprises an agent being a non-living compound or composition.

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47. (**Previously Presented**) The method of claim 46, wherein said non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate, phosphate group exposing compounds or compositions, preferably DNA, deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and calcium phosphate exposing compounds or compositions.

- 48. (**Previously Presented**) The method according to claim 40, wherein the sample is a biological, a food derived, a pharmaceutical or a cosmetic sample.
- 49. (Currently Amended) A method for diagnosing the susceptibility of an individual to an agent which possesses at least one sulphate and/or at least one phosphate group, the method comprising detecting in a sample a polypeptide comprising the sequence of SEQ ID NO:1, a functional fragment or derivative thereof, or a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof, wherein a shortened polypeptide or a shortened nucleic acid as compared to the full-length polypeptide or nucleic acid as defined by SEQ ID NO: 1 or SEQ ID NO: 2 is indicative of an increased susceptibility.
- 50. (**Previously Presented**) The method according to claim 49, wherein the sample is a body fluid, preferably blood, saliva, semen or liquor, which is isolated from the individual.

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51. (Previously Presented) The method according to claim 49, wherein the agent comprises

an agent being a microorganism.

52. (Currently Amended) The method of claim 51, wherein said microorganism is a

bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus,

Escherichia, Helicobacter, Salmonella Streptococcus, Staphylococcus, Escherichia,

Helicobacter, Salmonella and Bacillus Bacillus.

53. (Previously Presented) The method of claim 49, wherein said agent comprises an agent

being a non-living compared or composition.

54. (Previously Presented) The method of claim 53, wherein said non-living compound or

composition is selected from the group consisting of DSS, sulphated carbohydrates,

preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate,

phosphate group exposing compounds or compositions, preferably DNA,

deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and

calcium phosphate exposing compounds or compositions.

55. (Currently Amended) A method for determining in an individual the effective amount

of a pharmaceutical comprising an agent which possesses at least one accessible sulphate

and/or at least one accessible phosphate group, the method comprising detecting in a

sample a polypeptide comprising the sequence of SEQ ID NO:1, a functional fragment or

derivative thereof, or a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof,

wherein a shortened polypeptide or a shortened nucleic acid as compared to the full-length polypeptide or nucleic acid as defined by SEQ ID NO:1 or SEQ ID NO:2 is indicative for a lower effective amount.

- 56. (**Previously Presented**) The method of claim 55, wherein the sample is a body fluid, preferably blood, saliva, semen or liquor, which is isolated from the individual.
- 57. (**Previously Presented**) The method according to claim 55, wherein the agent comprises an agent being a microorganism.
- 58. (Currently Amended) The method of claim 57, wherein said microorganism, is a bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and Bacillus Bacillus.
- 59. (**Previously Presented**) The method of claim 55, wherein said agent comprises an agent being a non-living compound or composition.
- 60. (**Previously Presented**) The method of claim 59, wherein said non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates,

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preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate,

phosphate group exposing compounds or compositions, preferably DNA,

deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and

calcium phosphate exposing compounds or compositions.

61. (Currently Amended) A method of treating or preventing a disease caused by an-a non-

living agent possessing at least one accessible sulphate and/or at least one accessible

phosphate group comprising administering to a patient in need thereof a therapeutically

effective amount of at least one amino acid motif comprising 11 contiguous amino acids

derived from a polypeptide comprising the sequence of SEQ ID NO:1, or of a nucleic

acid encoding said amino acid motif.

62. (Previously Presented) The method according to claim 61, wherein the 11 contiguous

amino acids possess a sequence selected from the sequences GRVEVLYRGSW (SEQ ID

NO: 9), GRVEILYRGSW (SEQ ID NO: 10) and GRVEVLYQGSW (SEQ ID NO: 11).

63. (Currently Amended) The use-method according to claim 62, wherein the 11 contiguous

amino acids possess the sequence GRVEVLYRGSW (SEQ ID NO: 9).

64. (Currently amended) An in vitro method for binding an agent which possesses at least

one accessible sulphate group and/or at least one accessible phosphate group, the method

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comprising contacting the agent with an amino acid motif comprising 11 contiguous amino acids derived from a polypeptide comprising the sequence of SEQ ID NO:1.

- 65. (**Previously Presented**) The method according to claim 64, wherein the 11 contiguous amino acids possess a sequence selected from the sequences GRVEVLYRGSW (SEQ ID NO: 9), GRVEILYRGSW (SEQ ID NO: 10) and GRVEVLYQGSW (SEQ ID NO: 11).
- 66. (**Previously Presented**) The method according to claim 65, wherein the 11 contiguous amino acids possess the sequence GRVEVLYRGSW (SEQ ID NO: 9).